

Paleozoic lycopods (*Lepidocarpon*, *Miadesmia*) would seem to indicate that a variety of quasispermatophytic Lycopodiales await future discovery. Considerable space is devoted to the Filicales and stress is laid upon the new viewpoint resulting from the recent discoveries which have so greatly restricted the Filicales, their position in the Carboniferous flora becoming subordinate instead of dominant. True ferns of the family Botryopterideae are, however, described in detail. It may be remarked that the present state of opinion is preëminently transitional and unsatisfactory and, as it seems to me, is destined to considerable future modification. The Pteridospermatophyta or fern-like seed plants are described in considerable detail and will more than repay a careful perusal. The Gymnospermae are treated with great briefness since there is little of novelty to record.

With these few hints at the rich gleanings which await the student, this very brief and inadequate notice is brought to a close.

EDWARD W. BERRY.

MARYLAND GEOLOGICAL SURVEY.

## PROCEEDINGS OF THE CLUB

JANUARY 30, 1907

The second regular meeting for the year 1907 was called to order at the museum building of the New York Botanical Garden at 3:30 P. M., with Vice-president Underwood in the chair. Twenty-three persons were present.

A brief account of the reception given by the Club on December 26, 1906, and the minutes of the annual meeting, January 8, 1907, were read and approved by the Club.

The name of Miss Ruth Price, 19 East 48th Street, was presented for membership.

Under "unfinished business," the annual reports of the recording and the corresponding secretaries for 1906 were presented and accepted.

Resignations were received and accepted from the following persons: Mr. F. H. Blodgett, Baltimore, Md.; Mr. Charles L.

Case, 56 Wall St., New York City; Sarah B. Hadley, South Canterbury, Conn.; Mrs. Katherine Winthrop Kean, 25 East 37th St., New York City.

The following amendment to the Constitution, proposed by Dr. J. H. Barnhart at the preceding meeting of the Club, came up for discussion and was unanimously adopted :

“That Article III of the Constitution be amended by the substitution of the word ‘eight’ for the word ‘seven,’ so as to read, ‘associate editors, not to exceed eight in number.’”

The attention of the Club having been called to the fact that Dr. H. H. Rusby, elected at the meeting of December 11, 1906, to represent the Club in the Council of the New York Academy of Sciences, was already a member of the Council, Vice-president L. M. Underwood was elected as the Club's representative on the Council.

The secretary presented the matter of the Club's record of its membership and on motion the secretary was empowered to prepare a card catalogue of the members with pertinent data, to be kept in the custody of the secretary.

On motion, the secretary cast the ballot of the Club electing Miss Ruth Price to membership.

Dr. C. B. Robinson was nominated as associate editor, and on motion the secretary cast the ballot of the Club electing Dr. Robinson.

Dr. Marshall A. Howe, who had returned on that day from the island of Jamaica, gave an account of his experiences there during the disastrous earthquake of January 14, 1907.

The announced scientific program was as follows :

“New or Rare Mosses from Jamaica,” by Mrs. N. L. Britton.

Mrs. Britton exhibited some of the most interesting mosses collected in Jamaica, showing several genera and subgenera not heretofore known in the West Indies, and several new species, and also indicated reductions of some names to synonymy. There were also shown specimens of types of Jamaican species from the Mitten Herbarium and one of Miss Taylor's drawings of a new species and subgenus.

“The Probable Function of Tannin in Galls,” by Dr. Melville T. Cook.

The origin, chemistry, and uses of tannin have been studied very extensively, but other phases of the subject have received comparatively little attention. This is especially true concerning the functions which it serves in the plant. It is usually very abundant in diseased tissues, such as insect galls, fungus galls, fungus spots, etc. In insect galls it is developed very early and in some cases it appears to result in the gall-makers moving to other parts of the plant. It is also formed in fungus galls, frequently surrounding the point of rupture. In such fungus spots as those produced by *Cercospora* the successive circles are due to the depositing of the tannin within the tissues. The speaker has made extensive studies on the anatomy of both insect and fungus galls and is now conducting a series of physiological experiments.

C. STUART GAGER,  
*Secretary.*

FEBRUARY 12, 1907

The Club was called to order at the American Museum of Natural History, with President Rusby in the chair. Ten persons were present.

The reading and approval of the minutes of the meeting of January 30, 1907, was followed by the presentation of the name of Mrs. J. S. Ehrich, 1 West 72d St., New York City, for membership.

The president appointed the following committees for the current year :

*Finance.* — Judge Brown and Professor Richards.

*Admissions.* — Professor Burgess, Dr. Small, Dr. Curtis.

*Local Flora.* — (Phanerogams), Dr. Britton, Mr. Bicknell, Miss Mulford, Mr. Eggleston, Mr. Schneider; (Cryptogams), Professor Underwood, Dr. Howe, Dr. Murrill, Mrs. Britton, Mr. Williams.

*Program.* — Dr. Howe, Professor Underwood, Mrs. Britton.

*Field Meetings.* — Mr. Wilson, Mr. Nash, Mr. Vreeland.

Referring to the subject of the work of the committee on the local flora, the need of more active work was urged. To this end, a motion was made and seconded that the committee be empowered to appoint additional members to facilitate additional

study of the local flora and the enlargement of the herbarium of the Club. The motion was unanimously carried.

The secretary cast the ballot of the Club electing Mrs. J. S. Ehrich to membership.

The following scientific program was presented :

“Source of Nutrition of Submerged Aquatics,” by Dr. Raymond H. Pond. Dr. Pond gave an interesting account of his investigation of this problem, in which it was ascertained that submerged aquatic plants, when rooted in the soil, obtain nutriment from the latter, and so, in time, become contributors to the food content of the supernatant water. The advantage which thus results to the associated plankton, and consequently to the local fish fauna, was pointed out. These investigations also demonstrated the possession, by rooted aquatic plants, of abundant root-hairs, contrary to the previous general supposition. These results have been published in the U. S. Fish Commission Report for 1903, pp. 483 to 526.

An interesting discussion followed.

“Some Wound Reactions of Plants,” by Professor H. M. Richards. A popular exposition was given of the physiological effects of the wounding of plants.

The Club adjourned at 10 P. M.

C. STUART GAGER,  
*Secretary.*

## NEWS ITEMS

Dr. K. M. Wiegand, of the department of botany of Cornell University, has been appointed associate professor of botany in Wellesley College.

The death of J. Schneck, M.D., of Mt. Carmel, Illinois, is reported. Dr. Schneck wrote a “Catalogue of the Flora of the Wabash Valley,” and contributed several shorter botanical papers to various journals.

Dr. John A. Shafer, museum custodian of the New York Botanical Garden, returned on March 2 from a collecting expedition to the island of Montserrat of the British West Indies.